Potamogeton confervoides

Algae-like pondweed

Status

Federal status: G4 N3N4, Not listed
NH state status: S2S4, Candidate
ME state status: S3, Special Concern

Trends in northern New England are unknown as some populations appear to be doing very well and others may have disappeared.

The current and future outcome for *Potamogeton confervoides* across its current range is A. The current outcome for this species in the WMNF is B-C. In the WMNF, the future outcome is C or better.

Distribution

In Canada, it ranges east from Ontario to Newfoundland Island and Nova Scotia (excluding Prince Edward Island). In the U.S. it occurs from New England south to New Jersey and west to Pennsylvania, Michigan, and Wisconsin. Apparently there is a disjunct population in North and South Carolina.

This species is known to occur in seven New Hampshire counties: Coos, Grafton, Carroll, Merrimack, Cheshire, Rockingham, and Strafford. It is known from at least five ponds on the WMNF, but three of those have not been revisited in recent decades. It is abundant in two ponds on the Forest, in Livermore and Albany. Most ponds on the Forest provide suitable habitat and have not been surveyed, so it probably occurs in more locations. In Maine, 27 extant occurrences and 4 historic occurrences are reported from 12 of the 15 counties. There are extant occurrences in Fryeburg and Bethel in Oxford County, but neither is in the WMNF.

Habitat

Potamogeton confervoides occurs in strongly acidic soft-water bogs, lakes and ponds at a variety of elevations. It also can be found in slow-flowing acidic streams in some parts of its range. This species prefers muddy shores with lots of vegetation. Substrates vary from sand to peat and the water is typically very acidic (pH as low as 5.0) and nutrient poor. It is typically found at depths of less than 15', though water can be deeper.

Limiting Factors

Water chemistry is the primary limiting factor for this species. It is generally in habitats with a pH of 5.3-6.8, and is susceptible to increased alkalinity. Anything that adds nutrients to water, such as runoff, siltation, liming for fish habitat, herbiciding aquatic weeds, and even goose droppings, can result in habitat loss to eutrophication.

Wide fluctuation of water levels may also threatened populations of this species. Activities that increase the effect, such as dredging and damming, may be detrimental to the species.

Some lake and pond shores where this species occurs have been developed, eliminating suitable habitat. Invasive aquatic species also could outcompete this species or change the habitat.

Viability concern

WMNF outcomes are B-C currently and "C or better" in the future; habitat used is broader than only other aquatic plant species on WMNF list, so no surrogate species. *Potamogeton confervoides* is global and nationally ranked somewhat rare, but not rare locally, so maintaining viability in New Hampshire is important to the species as a whole.

Management activities that might affect viability

Activities that could increase runoff into suitable water bodies, such as logging, road building, and on-shore development, could reduce habitat suitability if runoff increases siltation or alkalinity.

Herbiciding aquatic weeds and liming to improve fish habitat could alter habitat suitability by increased the alkalinity of the water. Concentrations of human waste from recreational use near a population could have a similar effect.

Activities that alter water levels substantially, such as construction, modification, or removal of dams, including removal of beaver-created dams, could reduce habitat suitability.

Management to prevent, control, or eradicate invasive species could help prevent competition and maintain habitat suitability.

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